



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,815	07/15/2003	Jeffery R. Parker	GLOLP0108USF	7649
7590	08/07/2006		EXAMINER	
Donald L. Otto Renner, Otto, Boisselle & Sklar, LLP 19th Floor 1621 Euclid Avenue Cleveland, OH 44115-2191			SEMBER, THOMAS M	
			ART UNIT	PAPER NUMBER
			2875	
DATE MAILED: 08/07/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	11 Applicant(s)	
	10/619,815	PARKER ET AL.	
	Examiner Thomas M. Sember	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 July 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 10,16,51-56 and 74-78 is/are pending in the application.
- 4a) Of the above claim(s) 1-9,11-15,17-50 and 57-73 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 10,51-54 and 74-78 is/are rejected.
- 7) Claim(s) 16,55 and 56 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 July 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

***Response to Applicant's arguments***

***Drawings***

1. The drawings were received on 07/12/06. These drawings are approved.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 51, 53-54 and 74-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Albinger Jr. Albinger Jr. discloses a light emitting panel member having at least one input edge (2), at least one light source (8) optically coupled to a portion of the width of the input edge, and a pattern of individual light extracting deformities (10) on or in at least one panel surface of the panel member for producing a desired light output from the panel member, each of the deformities (10) having a length and width substantially smaller than the length and width of the panel surface and also having a well defined shape, **As broadly claimed, a majority of the deformities at different locations across the width and length on the panel surface having at least one light extracting surface that is angled at different orientations relative to the input edge depending on the location of the deformities on the panel surface to face the portion of the input edge to which the light source is optically coupled.**

Regarding claim 10, a majority of the deformities are arranged in radial rows in a radial pattern across the width and length of the panel surface with the light extracting surface of the deformities in each radial row in radial alignment (see figure 1) with the portion of the input edge to which the light source is optically coupled.

Regarding claim 53, the light extracting surface of at least some of the deformities is curved (see figure 1).

Regarding claim 54, the light extracting surface of at least some of the deformities is planar (see figure 1).

Regarding claim 74 wherein substantially all of the deformities across the width and length of the panel member have at least one light extracting surface that is oriented to face the portion of the input edge to which the light source is optically coupled (see figure 1).

Regarding claim 75, wherein the deformities have two or more intersecting surfaces that intersect the panel surface and intersect each other, at least one of the intersecting surfaces of the deformities comprising the light extracting surface of the deformities that is oriented to face the portion of the input edge to which the light source is optically coupled. (see figure 1).

Regarding claim 76, the intersection of the intersecting surfaces of the deformities forms a ridge. (see figure 1)

Regarding claim 77, the light extracting surface of at least some of the deformities is planar. (see figure 1)

Regarding claim 78, the light extracting surface of at least some of the deformities is curved. (see figure 1)

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albinger Jr. in view of Pritash et al '108. Albinger Jr. discloses the claimed invention except for the teaching that the light source is an LED. Pritash et al '108 teaches that a variety of light sources can be used to illuminate an edge lit panel including LEDs. It would have been obvious to one skilled in the art at the time the invention was made to substitute an LED or LEDs as taught by Pritash et al '108 for the light source of Albinger Jr. in order to provide a more efficient longer lasting low voltage light source.

***Allowable Subject Matter***

5. Claims 16 and 55-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to examiner's objections to the drawings, specification and the rejections under 112 first paragraph are found persuasive. The arguments regarding examiner's rejections of claims 16 and 55-56 are also found persuasive. However, applicant's arguments with respect to claims 10, 51, 53-54 and 74-78 are not found persuasive. The applicant argues that "the basis for this rejection is not understood, since all of the deformities of Albinger, Jr. are semi-spherical depressions and thus do not have at least one light extracting surface that is angled at different orientations relative to the input edge depending on the location of the deformities on the panel surface to face the portion of the input edge to which the light source is optically coupled as recited in claim 51. The examiner disagrees. As clearly shown in figure 1 of Albinger, Jr. , Albinger, Jr. discloses deformities (semi-spherical depressions) 10 which have light extracting surfaces that are angled at different orientations relative to the input edge 6 depending on the location of the deformities on the panel surface to face the portion of the input edge to which the light source is optically coupled as recited in claim 51. In fact, the angled pattern is the same pattern (in-line with light rays emitted from light source) as disclosed in applicant's figures 39-40. Further all the other claims (51, 53-54 and 74-78) are met because the at least one angled light extracting surfaces face the input edge 6 (the curved portions shown in figure 1) and at least one angled extracting surface is planar (the side surfaces). Claim 52, is properly rejected under 103 as stated above.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 8 A.M- 5.30 p.m. first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas M Sember  
Primary Examiner  
Art Unit 2875